

REMARKS

I. Status of Claims

Claims 1-10 and 12-14 are pending and under current examination. Applicants have amended claim 14 to recite "a spherical powder." Support for this amendment can be found throughout the specification and claims as originally filed, for example original claim 11. Accordingly, no new matter is added by the present amendment.

Applicants acknowledge and appreciate the numerous rejections that were withdrawn by the Examiner in the final Office Action dated June 11, 2008.

II. Rejections under 35 U.S.C. § 103

A. Claims 1-5 and 7-14

The Examiner rejects claims 1-5, and 7-14¹ under 35 U.S.C. § 103(a) as being unpatentable over EP 268 938 to Kadokura et al. ("Kadokura") in view of U.S. Patent No. 7,101,536 to Mongiat et al. ("Mongiat"). Specifically, the Examiner asserts that Kadokura teaches cosmetic compositions comprising a lamina comprising a matrix substance (e.g., silicon dioxide) and a finely divided metal or metal compound dispersed therein (e.g., titanium dioxide, zinc oxide, and silver powder), wherein the lamina have an aspect ratio of 3-100. See Office Action at 3. The Examiner concedes that Kadokura "does not teach the spherical powder of claims 11 and 12," but asserts that Mongiat teaches "using spherical powders of the instant claims as SPF enhancers in UV protective compositions" and that "[a]n additional beneficial effect provided by some spherical powders is a soft feel during spreading and skin mattifying." *Id.* at 4. From

¹ Applicants note that claim 11 was cancelled in Applicants' February 29, 2008, Amendment under 37 C.F.R. § 1.111, and in the present Office Action Summary, the Examiner acknowledges that claim 11 is cancelled. Therefore, Applicants assume the Examiner mistakenly included this claim and will not address it herein. In the event Applicants are incorrect, they respectfully request clarification.

this, the Examiner concludes that "it would have been *prima facie* obvious to ... modify the UV protective compositions of Kadokura et al. ... to use spherical powders ... to obtain better UV protection as well as to improve the skin feel and mattifying properties of cosmetic formulations as suggested by Mongiat et al." *Id.* Applicants respectfully disagree and traverse this rejection for at least the following reasons.

In making a rejection under 35 U.S.C. § 103, the Examiner "bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. See M.P.E.P. § 2142. In its decision in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 U.S.P.Q. 2d 1385 (2007), the Supreme Court confirmed that the "framework for applying the statutory language of §103" was still based on its landmark decision in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). Under *Graham*, there are four factors for consideration when determining whether an invention is obvious:

- (1) the scope and content of the prior art;
- (2) the differences between the prior art and the claims at issue;
- (3) the level of ordinary skill in the art; and
- (4) secondary considerations.

383 U.S. at 17, 148 U.S.P.Q. at 467. However, the Court indicated that there is no necessary inconsistency between the idea underlying the teaching, suggestion, or motivation ("TSM") test and the *Graham* analysis. *KSR*, 127 S. Ct. at 1741, 82 U.S.P.Q. 2d at 1389. As long as the TSM test is not applied as a "rigid and mandatory" formula, the test can provide "helpful insight" to an obviousness inquiry. *Id.*

Kadokura and Mongiat, whether considered separately or in combination, do not disclose or suggest the cosmetic composition as recited in independent claim 1 or the cosmetic additive as recited in amended independent claim 14. First, Applicants submit

that Kadokura does not disclose or suggest the "silicon based porous particles having an aspect ratio of at least 2," as recited in independent claims 1 and 14.

With respect to such porous particles, the Examiner alleged that "the same silicon based porous particles are taught" by Kadokura. See Office Action at 3. Applicants respectfully disagree, and submit that the Examiner did not provide any citation to the publication, nor do Applicants believe that such a citation exists, in support of this allegation. While Kadokura discloses numerous properties of the lamina taught therein, including particle diameter, thickness, and ability to screen ultraviolet rays, it does not teach that the lamina are porous.

Instead, Kadokura discloses a process in which the lamina of Kadokura is calcined at temperatures ranging from 300°C to 700°C. Specifically, examples 1-5 and 9-12 of Kadokura disclose a calcination step at a temperature between 300°C and 700°C. Kadokura, p. 6, line 38 through p. 9, line 41. Notably, however, the Examiner has not shown how such a process would result in the production of porous particles within the scope of the presently claimed invention, and Applicants submit there is no suggestion that the resulting particles of Kadokura's calcination process would be porous.

Additionally, as shown in Applicants' specification, Applicants' Example 1 contained porous PTSG 30A flakes and Comparative Example 1 contained non-porous TSG 30A flakes. Specification, p. 10, Table 1. Example 1 was found to have superior total transmission and haze than Comparative Example 1. Id., p. 11, Table 2 and line 18 through p. 12, line 1. In addition to these divergent properties, these examples also show that not all silicon based particles are porous. For at least these reasons,

Kadokura does not disclose or suggest "silicon based porous particles having an aspect ratio of at least 2," as recited in independent claim 1.

In addition, as noted above, the Examiner conceded that Kadokura does not disclose spherical powders. See Office Action at 4. The Examiner relied on Mongiat to allegedly overcome this deficiency of Kadokura. Mongiat, however, does not cure the deficiency regarding the failure of Kadokura to disclose silicon based porous particles. Further, while Mongiat discloses polymeric beads or hollow spheres as SPF enhancers, the polymeric beads or hollow spheres are merely one of many optional compounds which may be added to the formulation of Mongiat. Mongiat does not disclose use of the polymeric beads or hollow spheres in any of Mongiat's Examples of Oil/Water Emulsifier System (see col. 33, line 59 through col. 36, line 19), or in any of Mongiat's Examples 1-5 (see col. 36, line 23 through col. 38, line 16), and nothing would direct one of skill in the art to select that particular optional element for combination with the compositions of Kadokura.

Thus, for at least these reasons, one of ordinary skill in the art would not have combined the teachings of Kadokura and Mongiat, and Applicants submit that the Examiner has not established a *prima facie* case of obviousness.

Finally, Applicants submit that the comparative data presented in the Amendment under 37 C.F.R. § 1.111 filed February 29, 2008, has not been fully considered by the Examiner. This data shows that the claimed invention possesses unexpectedly improved properties over the prior art, thereby rebutting any *prima facie* case of obviousness. See M.P.E.P. § 716.02(a).

Specifically, Applicants point out that Examples 4 and 5 contained spherical powders, i.e., Plastic Powder D400 and Covabead LH-85, respectively. Whereas, Comparative Examples 5 and 6 contained "Mica Concord 1000" brand Mica particles and "Ceridust 9205F" brand wax powder, respectively. The details of the compositions are set forth in Table 1 below.

Table 1.

| | Example 4 | Example 5 | Comp. example 5 | Comp. example 6 |
|---------------------------------------------------------------------|-----------|-----------|-----------------|-----------------|
| Phase I | | | | |
| Cetyltrimethicone copolyol/polyglyceryl-4 isostearate/hexyl laurate | 8.6 | 8.6 | 8.6 | 8.6 |
| Dimethicone | 5.2 | 5.2 | 5.2 | 5.2 |
| Cyclomethicone | 5.5 | 5.5 | 5.5 | 5.5 |
| Isododecane | 3.0 | 3.0 | 3.0 | 3.0 |
| Isotcaryl Neopentanoate | 0.9 | 0.9 | 0.9 | 0.9 |
| Bentone gel | 8.6 | 8.6 | 8.6 | 8.6 |
| Phase II | | | | |
| Water | 46.5 | 46.5 | 46.5 | 46.5 |
| Butylene glycol | 6.0 | 6.0 | 6.0 | 6.0 |
| Magnesium sulfate | 0.9 | 0.9 | 0.9 | 0.9 |
| Preservatives | qs | qs | qs | qs |
| Phase III | | | | |
| PTSG 30A Flake | 5 | 5 | 5 | 5 |
| Sunsphere H51 (Asahi Glass) | 2 | | | |
| Plastic powder D400 (Toshibiki Pigment) | 2 | | | |
| Covabead LH-85 (LCW) | | 4 | | |
| Mica Concord 1000 (Sciama) | | | 4 | |
| Ceridust 9205F (Clariant) | | | | 4 |

Haze (based on the percentage of diffuse transmitted light) and total transmission of the compositions were measured using a NDH 2000 Hazemeter from Nippon Denshoku. All measurements were carried out on a 20 µm thin film after 10 minutes of drying at 37 °C using SPF quartz cell obtained from JASCO (Nihon Bunkou).

Examples 4 and 5 displayed 100 percent transmission and haze measurements of 73 and 85 percent, respectively. Comparative Examples 5 and 6 displayed 99 and 100 percent transmission, respectively, but had haze measurements of 56 and 58 percent, respectively. Thus, the compositions of Examples 4 and 5, which are those containing a spherical powder and of the invention, possess superior haze value and diffuse transmitted light, combined with very good transparency.

For at least the foregoing reasons, Applicants submit that the Examiner failed to establish a *prima facie* case of obviousness. Moreover, Applicants presented sufficient evidence to rebut any *prima facie* showing. Accordingly, Applicants submit that the rejection is improper and should be withdrawn.

B. Claim 6

The Examiner rejected claim 6 under 35 U.S.C. § 103(a) as being obvious over Kadokura and Mongiat in view of Reinehr et al., WO 01/43714 ("Reinehr"). While relying on Kadokura and Mongiat as in the rejection of claims 1-5 and 7-14 above, the Examiner concedes that neither Kadokura nor Mongiat teaches the use of fluorescent substances, as in pending claim 6. *See* Office Action at 5. The Examiner relies on Reinehr to cure this deficiency. *See id.* Specifically, the Examiner alleges that "Reinehr et al. teach using fluorescent substances of the instant claim in UV protecting skin care compositions," and that one would be motivated to use them in the matrices of Kadokura by the desire to obtain UV-protection and skin lightening effects. *Id.* Applicants disagree and respectfully traverse the rejection of claim 6.

In the present case, claim 6 depends from independent claim 1. As set forth above, the Examiner has not established a *prima facie* case of obviousness with

respect to the combination of Kadokura and Mongiat and Reinehr does not cure their deficiencies. Moreover, Applicants have submitted evidence of unexpected results from the present invention that would rebut any such case of obviousness.

Specifically, without acceding to the Examiner's characterization of Reinehr, Applicants submit that Reinehr does not overcome the deficiency of Kadokura, established above, that Kadokura is directed to the use of a calcination step, with which porous particles may not be produced. Further, Reinehr does not disclose or suggest a "[c]osmetic composition ... further comprising a spherical powder," as recited in independent claim 1, let alone provide any direction that would motivate one of skill in the art to make the proposed combination or to also add a fluorescent substance to the composition suggested by the Examiner. Thus, Reinehr does not overcome the deficiencies of either Kadokura or Mongiat.

Applicants submit that the combination of Kadokura, Mongiat, and Reinehr does not render Applicants' claimed invention obvious and respectfully request withdrawal of the rejection.

III. Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration of the present application, and timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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